



## SECTION 1011

### GEOTEXTILE

**1011.1 Scope.** This specification covers geotextile for use in subsurface drainage, sediment control and erosion control, or as a permeable separator.

**1011.2 Acceptance.** Acceptance of the material will be based on the manufacturer's certification and upon the results of such tests as may be performed by the engineer.

**1011.3 Material.** Geotextiles shall be in accordance with the physical and chemical requirements of AASHTO M 288 for the specified application, except as modified in this specification.

**1011.3.1 Subsurface Drainage Geotextile.** Subsurface drainage geotextile shall be used in subsurface drainage as a filter to protect drainage media from clogging with fines from adjacent soil. Typical applications include the lining of drainage trenches and the wrapping of drainpipes.

**1011.3.1.1** The minimum permittivity shall be  $1.0 \text{ sec}^{-1}$ .

**1011.3.1.2** The material shall be AASHTO Class 2.

**1011.3.2 Temporary Silt Fence Geotextile.** Temporary silt fence geotextile shall be used in supported or non-supported sediment control fencing.

**1011.3.3 Permanent Erosion Control Geotextile.** Permanent erosion control geotextile shall be used when the erosion control measure will not be removed, such as erosion control of slopes and channels when placed under a rock blanket, rock ditch liner, etc.

**1011.3.3.1** The minimum permittivity shall be  $1.0 \text{ sec}^{-1}$ .

**1011.3.3.2** The material shall be either AASHTO Class 1 or Class 2.

**1011.3.4 Separation Geotextile.** Separation geotextile shall be used as a separation material to prevent mixing of dissimilar material, and to control migration of backfill material through joints in structural elements.

**1011.3.4.1** The minimum permittivity shall be  $1.0 \text{ sec}^{-1}$ .

**1011.3.4.2** The material shall be either AASHTO Class 1 or Class 2.

**1011.3.5 Erosion Control Blankets.** Erosion control blankets shall be prequalified and categorized based on performance testing performed by the Texas Department of Transportation and the Texas Transportation Institute using the minimum standards cited in the Texas DOT Erosion Control Report "TXDOT / TTI Hydraulics and Erosion Control Laboratory Field Performance Testing of Selected Erosion Control Products Final Performance Analysis Through the Most Recent Evaluation Cycle".

**1011.3.5.1 Anchors.** Anchors as recommended by the erosion control product manufacturer shall be used.

**1011.3.5.2 Test Methods.** Erosion control blankets shall be tested and evaluated by the Texas Department of Transportation and the Texas Transportation Institute in accordance with the Texas DOT Erosion Control Report. The blankets will also be evaluated on the basis of their performance in the field.

**1011.3.5.3 Prequalification.** Prequalified procedures may be obtained by writing to the Texas Department of Transportation, Director of Construction and Maintenance, 125 East 11th Street, Austin, TX 78701-2483. A list of qualified erosion control blankets will be maintained by Construction and Materials. Erosion control blankets will remain on the list as long as field performance is satisfactory.

**1011.4 Certification.** The contractor shall furnish a manufacturer's certification to the engineer for each lot of material furnished stating the name of the manufacturer, the chemical composition of the filaments or yarns and certifying that the material supplied is in accordance with this specification. The certification shall include or have attached typical results of tests from specific lots for all specified requirements.